Solar Workforce Panel: Training

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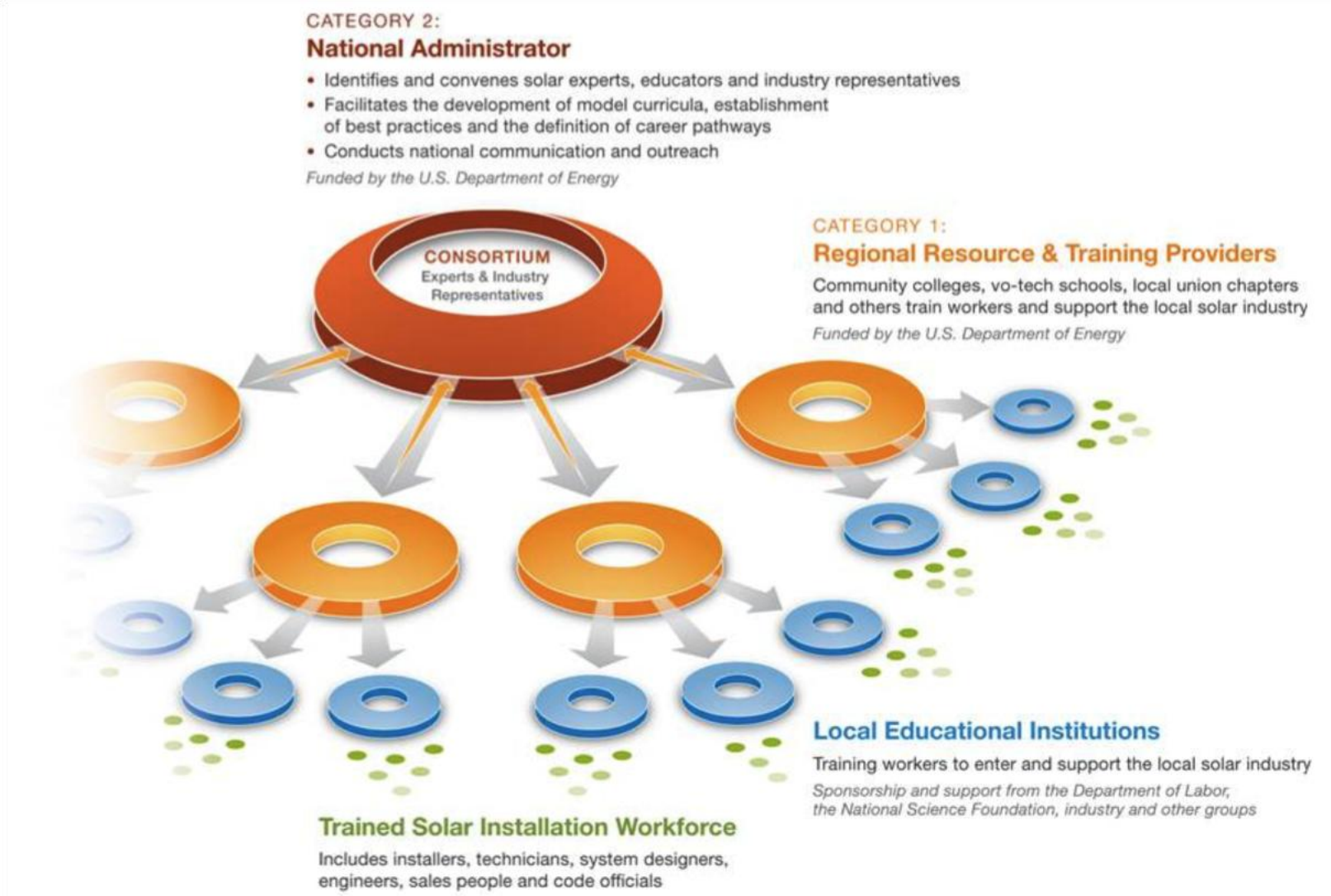
Topics

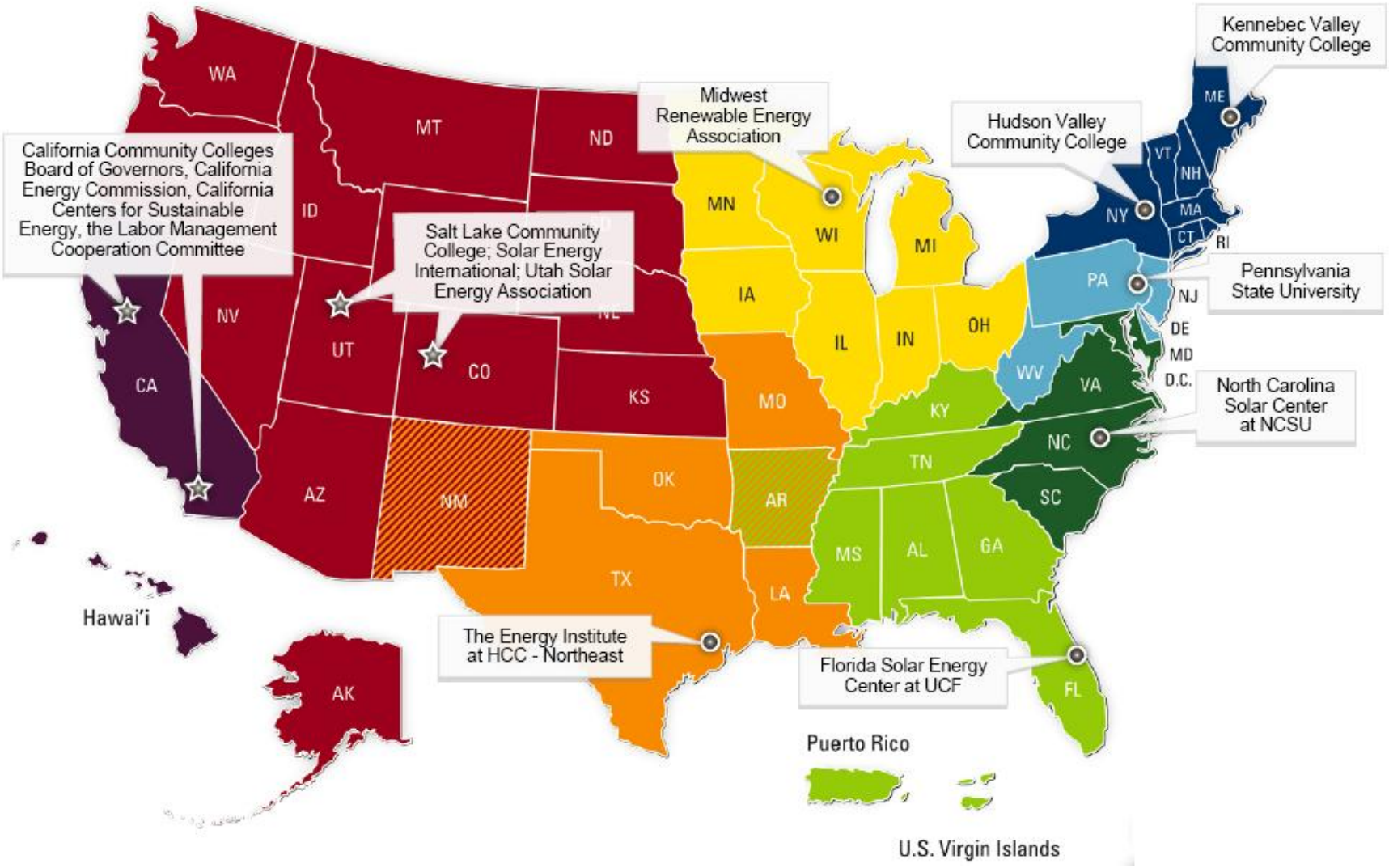
- Introduce the solar instructor network
- Summarize activities to date
- Discuss future training priorities

Solar Instructor Training



http://www1.eere.energy.gov/solar/instructor_training_network.html

Nationwide Solar Network



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Solar Accreditation

- Crucial Quality Control Mechanism
- Solar Installers

North American Board of NABCEP Certified Energy Practitioners ®

- Solar Instructors & Institutions

IREC Interstate Renewable Energy Council ISP

http://www.midwestsolartraining.org/

- Illinois – Heartland Community College
- Indiana – Purdue University
- Iowa – University of Northern Iowa
- Michigan – Northwest Michigan College
- Minnesota – Minnesota Renewable Energy Society
- Ohio – Green Energy Ohio
- Wisconsin – Midwest Renewable Energy Association

Activities So Far…

- 1st & 2nd round of instructor training
- Open source solar curriculum development
- Communications - http://www.midwestsolartraining.org/
- Survey of solar workforce activity in Indiana

Locations for Solar Training

- Ivy Tech - Lafayette
- IUPUI
- Ball State
- Purdue University
- IBEW Courses
- USW/ArcelorMittal Career Development
- Brown County Career Resource Center

Applied Energy Laboratory at Purdue University

- Focal point for teaching and research into high performance buildings.
- Solar photovoltaic and solar thermal systems that are remotely accessible over the internet

http://www.tech.purdue.edu/met/aboutus/facilities/knoy427.cfm

IUPUI B.S. Energy Engineering

- Renewable Energy Systems and Design
- Electric Power Networks and Interfaces
- Clean Power Generation
- Thermal and Hydro Generation
- Wind and solar Generation
- Hybrid & Electric Transportation
- Energy Storage Devices and Systems
- Fuel Cell & Battery Engineering
- Nuclear Power Systems
- Electric Power Systems
- Power Electronics
- Industrial Energy Systems Design
- Power System
- HEV Modeling and Simulation

IUPUI Sustainable Technology Certificate

- Collaboration between: ET, OLS, AT, SPEA
- <u>New Courses:</u>
- TECH 20000 Introduction to Sustainable Principles and Practices
- TECH 30000 Renewable Energy Technologies*
- TECH 30000 Green Building- LEED
- TECH 30000 Green Building: Project Planning and Cost Estimating
- TECH 30000 Energy Efficiency and Auditing
- TECH 40000 Economics and Leadership Aspects of Sustainable Technologies
- TECH 40000 Emerging Green Technologies*
- TECH 58100 Energy Efficiency in Industry
- TECH 58100 Electric Renewable Energy Systems
- TECH 58100 Thermal Renewable Energy Systems

Brown County Career Resource Center

- NABCEP – PV Entry Level

  Photovoltaic (PV) Solar Markets and Applications
  Safety Basics
  Electricity Basics
  Solar Energy Fundamentals
  PV Module Fundamentals
  System Components
  PV System Sizing
  PV System Mechanical and Electrical Design
  PV Siting
  Performance Analysis, Maintenance & Troubleshooting

- Time Table:

  August 8-12 from 8:00 am - 5:00 PM
  NABCEP Test August 13

- Taught by NABCEP certified PV installer, Alex Jarvis

Regional Observations

- Indiana has fewer solar installations, installers, instructors, and incentives than other Midwest states.
- Indiana has an underdeveloped, but growing network for solar education and advocacy.
- Solar training is being supported and institutionalized by community college programs

Strategies for Indiana

- Solar training that leads to jobs
- Accredited instructors, institutions, and installers
- Teaching facilities and installation opportunities for hands-on solar training
- Your input is needed….